

CLAIMS

What is claimed is:

1. A mandrel for supporting a stent, comprising:
a body for extending at least partially into a hollow stent for supporting
the stent during the process of coating the stent, the body having a first section
of a first size and a second section of a second size, the second size being
greater than the first size.
2. The mandrel of Claim 1, wherein the first section is longer than the
second section.
3. The mandrel of Claim 1, wherein the first section does not make
contact with the inner surface of the stent.
4. The mandrel of Claim 1, wherein the second size includes a diameter
that is less than the inner diameter of the stent.
5. The mandrel of Claim 1, wherein the body is attachable to a motor for
providing rotational motion.

6. A device for supporting a stent, comprising:
 - a mandrel capable of extending at least partially through a hollow body of a stent; and
 - a gear supported by the mandrel for rotating the stent during the process of coating the stent.
7. The device of Claim 6, wherein the positioning of the gear on the mandrel can be adjusted.
8. The device of Claim 6, wherein the gear includes a textured or roughened surface.
9. The device of Claim 6, wherein the gear includes teeth.
10. The device of Claim 6, wherein the diameter of the gear is greater than the diameter of the mandrel and the diameter of the gear is less than the inner diameter of the stent.
11. The device of Claim 6, wherein the outer surface of the mandrel does not contact the inner surface of the stent.

12. A method of coating a stent, comprising:
 - positioning a stent on a mandrel having a gear member;
 - rotating the mandrel to cause the gear member to provide rotational motion to the stent; and
 - applying a coating material to the stent.
13. The method of Claim 12, wherein the outer surface of the mandrel does not make contact with the inner surface of the stent.
14. The method of Claim 12, wherein the diameter of the gear member is less than the inner diameter of the stent.
15. The method of Claim 12, wherein the act of applying comprises spraying a composition including a polymer added to a fluid and optionally an active agent added thereto onto the stent.
16. The method of Claim 15, wherein the composition is sprayed onto the stent in a downward direction.
17. The method of Claim 12, additionally comprising moving the stent in a linear direction along the longitudinal axis of the stent during the act of applying.